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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

MAY 26 2000

Edward C. Anton, Acting Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Dear Mr. Anton:

The Environmental Protection Agency (EPA) has reviewed the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, as amended by the Central Valley Regional Water Quality Control Board (Regional Board or RB), and approved by the State Water Resources Control Board (State Board or SB) and Office of Administrative Law (OAL), through September 1995. This includes the amendments approved by the State Board in the following resolutions:

- SB Res. 90-28, adopted by the State Board on March 22, 1990 (re: RB Res. 89-56, which was adopted by the Regional Board on March 31, 1989)[1], which re-formatted and updated the Basin Plan for the first time since its original adoption in 1975;

- SB Res. 90-20, adopted by the State Board on February 15, 1990 (re: RB Res. 90-28, which was adopted by the Regional Board on January 26, 1990); which revised the pesticide objectives for inland surface waters covered by the Plan and added new provisions regarding their implementation;

- SB Res. 95-12, adopted by the State Board on February 16, 1995, and approved by the OAL on May 9, 1995 (re: RB Res. 94-380, which was adopted by the Regional Board on December 9, 1994), which updated and reformatted the Basin Plan, and made substantive changes to beneficial uses, water quality objectives, and implementation programs; and

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[1] Regional Board staff advised EPA that, because the 1989 amendments were largely format-related, no itemized list of amendments was prepared. Furthermore, at that time, the Regional Board had not yet adopted the practice of producing a strikeout/mark-up version of the Basin Plan to delineate proposed amendments. For purposes of conducting our review of the Basin Plan amendments under CWA §303(c)(3), therefore, the nature of the 1989 amendments was deduced by a comparative reading of the approved 1975 Basin Plan and the "2nd Edition" of the Basin Plan that was produced in 1989.

- SB Res. 95-42, adopted by the State Board on July 20, 1995, and approved by the OAL on September 25, 1995 (re: RB Res. 95-142, which was adopted by the Regional Board on May 26, 1995), which authorized the Regional Board to include compliance schedules in NPDES permits under certain conditions.

Today's Action

Section 303(c) of the CWA requires EPA to approve or disapprove new or revised state-adopted water quality standards. Pursuant to CWA Section 303(c) and the implementing federal regulations at 40 CFR 131, and subject to certain limitations and understandings, as discussed below, EPA hereby approves, in entirety, the amendments addressed in SB Resolutions 90-20 and 95-42, and approves most of the amendments addressed in SB Resolutions 90-28 and 95-12. EPA's approval is based on our finding that the approved amendments are consistent with the requirements of the CWA and EPA's regulations at 40 CFR 131.5 and 131.6. Certain provisions of the amendments addressed in SB Resolutions 90-28 and 95-12 are hereby disapproved. These provisions are itemized in Attachment A.

EPA's action today pertains only to those portions of the amendments that are subject to EPA's water quality standards approval authority under Section 303(c) of the Clean Water Act (CWA); i.e., the portions addressing antidegradation, beneficial uses, water quality criteria, and implementation of water quality standards for surface waters, and is subject to the results of consultation under section 7 of the Endangered Species Act (ESA). Certain of the approved amendments are approved with understandings. These are discussed in Attachment B. To ensure that no misunderstanding occurs, please advise me within a month of the date of this letter whether or not those understandings comport with the State's views.

Disapproved Provisions

As noted above, EPA is disapproving the provisions discussed in Attachment A to this letter. To avoid the need for federal promulgation of water quality standards to ensure compliance with the CWA and applicable regulations, the State must address these disapprovals by removing or revising the disapproved provisions, as necessary to eliminate the cause of the disapproval, within 90 days of receipt of this letter.

Public Participation

EPA compliments the State on its efforts to include the public in the development and review of new and revised water quality standards. Public involvement is an integral component of a successful water quality program. Based upon our review, the public review procedures followed by the State in the development of Regional Board Resolutions 89-56, 90-28, 94-380, and 95-142, and their associated State Board Resolutions are consistent with the procedural requirements for public participation in triennial reviews of state water quality standards.

ESA Consultation with the Services on EPA's Action

EPA has initiated consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (collectively, the Services) on today's action, under Section 7(a)(2) of the Endangered Species Act. Section 7(a)(2) states that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species. EPA's action today is subject to the results of this consultation. EPA believes that it is unlikely that the Service(s) will conclude that the standards that EPA is approving today violate section 7(a)(2), since the standards are expressly designed to "protect the public health or welfare, enhance the quality of water and serve the purposes" of the Clean Water Act, which are to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters"; however, EPA retains the discretion to revise its approval decision if the consultation identifies deficiencies in the standards requiring remedial action by EPA.

Relationship of Today's Action to Previous Actions on Amendments to the Basin Plan

EPA's last action on this Basin Plan was taken on May 24, 2000, at which time we approved most of the Basin Plan amendment provisions of SB Res. 96-78 (re: RB Res. 96-147, the "Grassland amendments", adopted by the Regional Board on May 3, 1996), which was approved by the OAL on January 10, 1997. EPA took action on the 1996 Grassland amendments prior to today's action on the 1990-95 amendments because of the importance of the Grassland amendments for the protection of threatened and endangered species with regard to selenium concentrations in those and other water bodies.

Today's action does not alter the conditions and interpretations of our previous water quality standards approval letters of December 30, 1975, May 28, 1976, June 2, 1976, September 20, 1984, August 7, 1985, April 13, 1990, and May 24, 2000 for this basin plan. Furthermore, any provisions of SB Res. 96-78 (the Grassland amendments) that EPA approved supercede any corresponding or conflicting provisions of the amendments that are approved by this letter.

Water Quality Standards Applicable to the Sacramento River and San Joaquin River Basins

In combination with EPA's May 24, 2000 action on the Grassland amendments, today's action completes EPA's review of all water quality standards-related portions of the Basin Plan that are embodied in the Fourth Edition of the Plan. The Fourth Edition was released by the Regional Board on September 15, 1998 and incorporates all amendments to the Basin Plan that had been adopted by the State as of that date. The federally-approved water quality standards applicable to the Sacramento River and San Joaquin River Basins now consist of:

- Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, 1998;

- Water Quality Control Plan for Control of Temperature in the Coastal and Interstate

Waters and Enclosed Bays and Estuaries of California, as amended by State Board Resolution 75-89, September 1975;

- Water Quality Control Policy for the Enclosed Bays and Estuaries of California, May 1974;

- Resolution 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California, as supplemented by State Board Order No. WQ 86-17;

- Memorandum to Regional Board Executive Officers from State Water Resources Control Board, Subject: Federal Antidegradation Policy. Oct. 7, 1987; and

- Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Bay/Delta Plan), SB Resolution 95-24, May 1995.

The following federally promulgated standards are also applicable to these waters:

- Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants; States' Compliance Final Rule, 40 CFR 131.36, as amended May 4, 1995;

- Water Quality Standards for Surface Waters of the Sacramento River, San Joaquin River, and San Francisco Bay and Delta of the State of California (40 CFR 131.37) applicable to waters specified in the Water Quality Control Plan for Salinity for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, adopted by the California State Water Resources Control Board in State Board Resolution No. 91-34 on May 1, 1991; and

- Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California, Final Rule (the California Toxics Rule or CTR), 65 FR 31681, May 18, 2000.

Issues that Should be Addressed in the Next Triennial Review

Several aspects of the Basin Plan should be addressed within the next triennial review. These issues are itemized and discussed in Attachment C. While some of these issues are specific to the Sacramento River and San Joaquin River Basin Plan, many are common to several or all of the State's basin plans.

EPA intends to continue to work closely with the Regional board during the upcoming triennial review process. Our aim is to take prompt action on any further Basin Plan amendments, as well as to provide whatever assistance the Regional Board needs. Once again, EPA commends the Central Valley Regional Board for its dedication and success in revising the Basin Plan. If there are any questions regarding EPA's action, please contact Kathy Goforth, of my staff, at 415-744-1902. As always, EPA looks forward to continued cooperation with the State in achieving our mutual environmental goals.

Sincerely,

Alexis Strauss
Director, Water Division

Attachments

cc: Gary Carlton (Regional Board 5)
Paul Lillebo (SWRCB)
Lee Michlin (Regional Board 1)
Larry Kolb (Regional Board 2)
Roger Briggs (Regional Board 3)
Dennis Dickerson (Regional Board 4)
Harold J. Singer (Regional Board 6)
Phil Gruenberg (Regional Board 7)
Gerald J. Thibeault (Regional Board 8)
John Robertus (Regional Board 9)
Steve Schwarzbach (FWS)
Miles Croom (NMFS)
Jennifer Wigal (Mail Code 4305)

ATTACHMENT A

DISAPPROVED PROVISIONS OF SB RES. 95-12 (RE: RB RES. 94-380) AND SB RES. 90-28 (RE: RB RES. 89-56)

1. **Deletion of the text of footnote #1 to Table II-1 ("*Those streams not listed have the same beneficial uses as the streams lakes Reservoirs to which they are tributary.*"); and addition of the following provision in the text of the "Existing and Potential Beneficial Uses" chapter: "*The beneficial uses of any specifically identified water body generally apply to its tributary streams. In some cases a beneficial use may not be applicable to the entire body of water. In these cases the Regional Water Board's judgment will be applied. It should be noted that it is impractical to list every surface water body in the Region. For unidentified water bodies, the beneficial uses will be evaluated on a case-by-case basis.*" [SB Res. 95-12]**

   Under the amended language, it is not clear which uses apply to waters not identified by name in Table II-1, nor, even for those water bodies that are identified by name, which uses apply to the entire body of water versus only certain segments. As a result, EPA is unable to determine (as required by 40 CFR 131.5) whether or not the State has adopted, for the waters within the Sacramento/San Joaquin River basins, uses that are consistent with the requirements of the CWA, and criteria that protect those designated uses. The wording of the amendment gives the impression that (1) the geographic extent of applicability of the uses already designated for any water body can be determined on a case-by-case basis simply by an exercise of judgment by the Regional Board, and may vary depending upon the situation at hand, and (2) the uses applicable to any given tributary can be designated or modified in a similar manner.

   The deleted footnote (i.e., the "tributary rule"), in effect, established uses for all tributary streams not identified by name in Table II-1. The Regional Board has not demonstrated that any of those uses that were so designated as existing uses are not, in fact, existing uses (as defined in 40 CFR 131.3(e)), nor has the Regional Board demonstrated (as required by 40 CFR 131.10(g) for removal of designated uses that are not existing uses) that any of the uses that were so designated as potential uses are not attainable (as defined by 40 CFR 131.10(d)) in any of the waters covered by the tributary rule footnote. If the Regional Board wishes to remove any of the uses designated by means of the tributary rule from any waters covered by that rule, it must do so by means of a public process that fully complies with the requirements of 40 CFR 131.10. Upon completion of such a process, such waters and their amended designated uses must be identified in the Basin Plan. Similarly, to restrict the applicability of any uses that are currently designated for a water body to only certain segments of that water body, the removal of those uses from other segments of the water body must also be accomplished in accordance with the requirements of 40 CFR 131.10.

   EPA recognizes that the Regional Board's interpretation of the effect of the tributary rule may differ from that described above; however, regardless of how the tributary rule is

interpreted, the State must go through a public process (see 40 CFR 131.10.(e)) in order to add or remove any uses from a water body; and, if the uses that the State wishes to designate for a given water body – tributary or otherwise – do not include the uses specified in CWA §101(a)(2), the State must conduct a Use Attainability Analysis, in compliance with 40 CFR 131.10(j), to demonstrate that the CWA §101(a)(2) uses are not attainable. The designated uses of a water body are integral components of the water quality standards for that water body, and, therefore, must be specified in the Basin Plan (i.e., the Regional Board cannot simply designate uses in the course of, for example, drafting a permit, without first adopting the uses into the Basin Plan through an appropriate public process).

To assure compliance with the CWA and applicable regulations, the State must, within 90 days of receipt of this letter, (1) clearly identify the uses designated for tributaries that are not currently identified in Table II-1, and (2) eliminate the ambiguity created by the amendment regarding the geographic extent of applicability of the uses assigned to each water body. One way in which the former can be accomplished is by deleting the amended language and restoring the tributary footnote to Table II-1. This would not preclude later modifying the uses so designated for any tributary, if appropriate, provided that such modification is accomplished in accordance with the requirements of 40 CFR 131. The latter can also be accomplished by deleting the amended language (in particular, the second and third sentences). Another option for resolving both issues would be to amend the provision to read as follows: "*[T]he beneficial uses of any specifically identified water body generally apply to its tributary streams. In some cases, a beneficial use may not be appropriate for the entire body of water and/or its tributaries. In these cases, the Regional Water Board may amend the Basin Plan to modify the use designation. Any such amendment must comply with the federal regulations at 40 CFR 131.*"

2. **Removal of general dissolved oxygen objectives for the Delta [SB Res. 95-12]**

EPA disapproves the removal of the general dissolved oxygen (DO) objectives for waters within the legal boundaries of the Delta, which resulted from rearrangement of the text of the DO objectives. Prior to the adoption of RB Resolution 94-380, the general DO objectives, which specify percent saturation requirements, applied to all Delta waters, and constituted the only DO objectives for those Delta waters "which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use". By rearranging the text, the Regional Board eliminated the applicability of the general DO objectives to any Delta waters, and left those water bodies "which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use" with no DO objectives at all. It is EPA's understanding that this was an unintended result of the amendment. The State provided no rationale for the amendment other than to say, in the associated Staff Report, that the "Dissolved Oxygen" section was "reorganized for clarity".

Several aquatic life uses are designated as existing uses for the Delta. DO objectives are needed to support those uses; therefore, the absence of DO objectives for certain waters within the Delta will not provide the level of water quality necessary to support the existing

uses of those waters. With regard to those Delta waters for which specific minimum DO concentration objectives still apply under RB Res. 94-380, the State has not demonstrated that those objectives, alone, are sufficient to protect existing uses and water quality as required under the federal and State antidegradation policies. See, e.g., 40 CFR 131.12 (a)(1) and (2).

To ensure compliance with the CWA and applicable regulations, the State must, within 90 days of receipt of this letter, amend the Basin Plan to either restore the applicability of the general DO objectives to all Delta waters, or apply new DO objectives to ensure that the designated uses of all Delta waters are protected. Any new DO objectives must meet the requirements of 40 CFR 131.11 and 40 CFR 131.12. Guidance for the development of DO criteria is available in EPA's *Ambient Water Quality Criteria for Dissolved Oxygen*, which was published in 1986.

3. **Addition of language that misrepresents the federal antidegradation policy [SB Res. 90-28]**

EPA disapproves the following portion of the discussion of State Water Board Resolution No. 68-16, which was added to the "Control Action Considerations of the State Water Board", "Policies and Plans" section of the Implementation chapter: "*[t]he federal antidegradation policy applies if a discharge or other activity, which began after November 28, 1975, will lower surface water quality. Application of the federal policy may be triggered by water quality impacts or mass loading impacts to receiving waters.*". These two sentences provide an incomplete and misleading interpretation of the federal antidegradation policy. November 28, 1975 is the date used in 40 CFR 131.3(e) to define "existing uses" of a water body. The antidegradation policy applies to the level of water quality that must be protected in a given water body, irrespective of any discharge, i.e, the antidegradation policy also applies to the designation and removal of uses; its applicability need not be triggered by a discharge or any particular "activity". To ensure compliance with the CWA and applicable regulations, the State must, within 90 days of receipt of this letter, amend the Basin Plan so as to accurately reflect the federal antidegradation policy. An acceptable modification would be to replace those sentences with the following: "*[i]n addition to requiring the maintenance of high quality waters, the federal antidegradation policy requires existing uses, and the level of water quality necessary to protect them, to be maintained, and prohibits any reduction in water quality or protection thereof for high quality waters that constitute outstanding National resources. The federal antidegradation policy applies to any action or activity that may reduce the water quality in, or the level of protection afforded to, a water body that has an existing use. Existing uses are those uses actually attained in the water body on or after November 28, 1975, regardless of whether or not they are included in the water quality standards.*".

ATTACHMENT B

UNDERSTANDINGS

1. The replacement, in Table II-1, of #59 "PROPOSED NASHVILLE RESERVOIR TO DELTA" with "SOURCE TO DELTA" is approved with the understanding that Nashville Reservoir does not exist, and that the retention of conflicting sets of designated uses for #57 "SOURCES TO NASHVILLE RESERVOIR (PROPOSED)" and #58 "NASHVILLE RESERVOIR (PROPOSED)" was unintended. EPA understands that the river segment descriptions and uses listed at #57 and #58 are no longer in effect and will be stricken from the table in the next triennial review, since their retention was a typographical error.

2. Revision of the eighth paragraph of the Water Quality Objectives chapter (the paragraph that begins, "The **third** point. . .") to specify that "any State or Federally promulgated objectives applicable to the basins covered by this plan are intended to govern the levels of constituents and characteristics in the main water mass. . ." is approved with the understanding that all waters of the Sacramento and San Joaquin River basins are part of the "main water mass", except for those areas designated as zones of dilution as part of effluent limitations in any NPDES permits. This is consistent with EPA's written understanding of the term "main water mass" in our approval of the 1975 Basin Plan, and with the State's adoption of a mixing zone provision in the same paragraph (see item 3, below).

3. It is EPA's understanding that the last sentence of the eighth paragraph of the Water Quality Objectives chapter (the paragraph that begins, "The **third** point. . ."), which says that the water quality objectives in the Basin Plan ". . . may not apply at or in the immediate vicinity of effluent discharges, but at the edge of the *mixing zone* if areas of dilution or criteria for diffusion or dispersion are defined in the waste discharge specifications" merely provides the option of establishing mixing zones, but does not prohibit the application of objectives as end-of-pipe limits.

4. It is EPA's understanding that temperature and salinity objectives in the federally promulgated Water Quality Standards for Surface Waters of the Sacramento River, San Joaquin River, and San Francisco Bay and Delta of the State of California (40 CFR 131.37) and the EPA-approved "Delta Plan" (SB Res. 95-24) supercede those in the EPA-disapproved 1991 "Water Quality Control Plan for Salinity" that is referenced under "Chemical Constituents", "Salinity", "Temperature", and Table III-5. It is also EPA's understanding that, in the event that any conflicts exist between the Basin Plan and the federal rule or the Delta Plan, the more stringent/protective objective applies.

5. It is EPA's understanding that: (1) Table II-1 notwithstanding, the MUN use is designated for all waters in the Sacramento and San Joaquin River Basins (including waters not identified by name in Table II-1), except those specifically excepted; (2) the Regional Board will only make exceptions to such designation in accordance with the provisions of SB Res. 88-63; (3) any such exceptions will be adopted into the Basin Plan through a public process

in accordance with the requirements of 40 CFR 131.10, and (4) the only water bodies so excepted, to date, are Salt Slough, Mud Slough (north), and the 43 wetland water supply channels within the Grassland watershed. Furthermore, it is EPA's understanding that waters may be considered, under SB Res. 88-63, to be "suitable" or "potentially suitable" for municipal or domestic water supply regardless of whether or not they are actually in use for these purposes; and that, for all waters that are considered "suitable" under SB Res. 88-63, MUN is designated as an "existing" use, as that term is defined in 40 CFR 131.3(e), and for all waters that are considered "potentially suitable" under SB Res. 88-63, MUN is designated as a "potential" use for water quality standards purposes. Attachment D to this letter lists the waters that are identified by name in Table II-1 for which MUN is currently not identified in that table as a designated use.

6. The amendment of the Regional Waivers subsection of the Implementation chapter to authorize the Regional Board to allow "short-term variances from Basin Plan provisions" is approved with the understanding that, to the extent that such Basin Plan provisions include water quality standards, the State's procedures for granting a variance will be adopted into the Basin Plan and approved by EPA before any such variances are granted, and that any individual variances from water quality standards must also be approved, in advance, by EPA. Procedures for granting variances from water quality standards must be consistent with the substantive requirements of 40 CFR 131. EPA's Water Quality Standards Handbook and the Water Quality Standards Advance Notice of Proposed Rulemaking (ANPRM, 63 FR 36742, see section III.B.4.d.i. Variances) describe EPA's current policy regarding variance procedures.

ATTACHMENT C

ISSUES THAT SHOULD BE ADDRESSED IN THE NEXT TRIENNIAL REVIEW

NOTE: Issues 1 through 11 were previously identified in the attachment to EPA's May 24, 2000 action on the Grassland amendments to the Basin Plan. Issues 12 and 13 have been added as a result of EPA's review of the amendments addressed by today's action.

1. **Re-examination of the designated uses for the wetland water supply channels of the Grassland watershed:** As discussed in EPA's May 24, 2000 action on the Grassland amendments to the Basin Plan, since the uses designated for the wetland water supply channels of the Grassland watershed do not include REC-1 nor REC-2, which are "goal uses" specified in section 101(a)(2) of the Clean Water Act, these water bodies must be re-examined every three years, in accordance with 40 CFR 131.20(a), to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State must revise its standards accordingly.

2. **Lack of RARE, GWR, and FRSH designations for some waters:** The Basin Plan does not designate any waters for the RARE, GWR, nor FRSH uses. This has been acknowledged in every edition of the Plan since 1975 via a note under the "Surface Water Bodies and Beneficial Uses" table, which states that "[s]urface waters of the Sacramento and San Joaquin River Basins falling within these beneficial use categories will be identified in the future as part of the continuous planning process to be conducted by the State Water Resources Control Board". Many waters in the Sacramento/San Joaquin basins are known to support (or to have supported at some time since November 28, 1975) a number of threatened and endangered species; therefore, RARE is an existing use for those waters. The beneficial use RARE should be assigned to all waters within the Sacramento/San Joaquin basins that are known to support (or to have supported at any time since November 28, 1975) aquatic habitats that are necessary, at least in part, for the survival and maintenance of plant or animal species designated as rare, threatened, or endangered under State or federal law. Similarly, the beneficial uses GWR and FRSH should be assigned to all waters within the Sacramento/San Joaquin basins that are known to support (or to have supported at any time since November 28, 1975) groundwater recharge and freshwater replenishment uses, respectively.

3. **Lack of adequate priority toxic pollutant numeric criteria:** The Basin Plan currently lacks adequate priority toxic pollutants numeric objectives. EPA recognizes that this issue will be considerably resolved with the completion of the California Toxics Rule (CTR). However, as you are likely aware, EPA is committed to a schedule for re-evaluating the criteria included in the CTR for selenium, mercury, PCP and some metals over the next two years. Once that process has been completed, EPA is committed to propose criteria to amend those in the CTR within a year after completion of revised criteria guidance for these pollutants. EPA intends to amend the CTR unless the State and/or Regional Boards adopt(s) new objectives based on the new federal criteria. The National Marine Fisheries Service

recommended, in its May 10, 2000 concurrence letter regarding EPA's action on the Grassland amendments to the Basin Plan, that the results of EPA's re-evaluation of the selenium criteria in the CTR be incorporated into the next triennial review of the Basin Plan. In the meantime, if more recent information suggests that the criteria should be more stringent, Region 9 believes that the narrative criteria provide the legal basis for applying this new information in the development of more stringent effluent limitations.

4. **Update of bacteria objectives for recreational uses:** The Basin Plan's water quality objectives for bacteria rely on fecal coliform bacteria as indicators. In 1986, EPA published its 304(a) water quality criteria document for bacteria which recommends the use of *Escherichia coli* (*E. coli*) and enterococci, rather than fecal coliform, as indicators for the protection of primary contact recreation. The epidemiological data upon which the national criteria are based indicate that these indicators are better correlated to health affects related to water-contact recreation. The Basin Plan should be revised to be consistent with these 1986 criteria. EPA's *Action Plan for Beaches and Recreational Waters* (EPA/600/R-98/079, March 1999) calls for all states to adopt bacterial standards that are consistent with current EPA guidance by 2003. EPA will promulgate such standards for any state that does not meet that deadline.

5. **TMDLs:** The Basin Plan should incorporate any water quality standards that have been adopted or revised as part of any TMDL action for waters within the Sacramento and San Joaquin River Basins..

6. **Lack of objectives for ammonia and chlorine:** Objectives for these two pollutants should be developed in the next triennial review. An announcement in the Federal Register of the availability of EPA's revised national criteria guidance for ammonia was published on December 22, 1999, with a time frame for expected state adoption of numeric ammonia criteria that will be applicable to all state waters. As noted in the announcement, EPA will likely promulgate criteria for any state that does not adopt such criteria into its water quality standards, in order to ensure that ammonia criteria are in effect in all states by 2004. Objectives for chlorine should be based on a consideration of EPA's water quality criteria guidance for chlorine (*Ambient Water Quality Criteria for Chlorine - 1984*, EPA 440/5-84-030), which was published in January 1985.

7. **Adoption of nutrient objectives:** EPA, along with state, tribal, and other federal agencies, is currently undertaking development of waterbody-type guidance describing the techniques for assessing the trophic state of a waterbody and methodologies for deriving numeric nutrient water quality criteria appropriate to different geographic regions. The criteria guidance is expected to be completed before the end of the year 2000. Separate guidance will be developed for rivers, lakes, coastal waters, and wetlands. EPA will also publish nutrient water quality criteria in the form of numerical regional target ranges for States to use as guidance in adopting water quality standards. Once water body-specific guidance and criteria are established, EPA expects and will assist States to adopt nutrient criteria, for waters that are not already covered by nutrient standards for over-enrichment, into water quality standards no later than the end of the year 2003. We look forward to working with

the Regional Board to accomplish this goal in the next triennial review of the Basin Plan.

8. **Revision of the Basin Plan to reflect "the Alaska decision"**: The Foreward to the Fourth Edition of the Basin Plan states that Basin Plans and amendments thereto become effective upon approval by the State Water Board. On April 27, 2000, EPA published a final rule regarding when state water quality standards become effective for Clean Water Act purposes (the "Alaska Rule", named after the court's decision in *Alaska Clean Water Alliance v. Clark)*. The rule provides that state water quality standards or amendments to such standards that are submitted to EPA after May 30, 2000 (the effective date of the rule), must be approved by EPA before such standards or amendments are considered to be in effect under the CWA. The "Foreward" to future editions of the Basin Plan should reflect this new interpretation of the law.

9. **Revision of toxicity objectives**: The Basin Plan currently includes a narrative toxicity objective. When the State Water Resources Control Board completes its action on the proposed Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, statewide implementation procedures for chronic toxicity will be available to the regions. As part of the triennial review, the Board should evaluate the combined requirements for acute and chronic toxicity, along with EPA's *Technical Support Document for Water Quality-based Toxics Control* (1991) and the *EPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*, to determine whether further actions are needed to update or supplement basin plan standards to ensure that beneficial uses are fully protected. Implementation procedures for narrative toxicity objectives in NPDES permits must be consistent with NPDES regulations at 40 CFR 122.44(d)(1).

10. **Update of Dissolved Oxygen (DO) Objectives:** The Basin Plan includes percent saturation and minimum concentration objectives for DO that were approved in 1975. In 1986, EPA published its *"Ambient Water Quality Criteria for Dissolved Oxygen"*, which recommends cold water and warm water criteria based on 7- or 30-day mean and 1-day minimum concentration values, including values for the protection of early life stages. The DO objectives in the Basin Plan should be updated to be consistent with the 1986 criteria.

    EPA recommends that the State also re-evaluate the appropriateness of the exception language regarding Delta waters "which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use". Although this exception was approved in the 1975 Basin Plan, it is no longer clear to which waters it pertains. Furthermore, even where fish have been excluded, there may be other species that have minimum DO requirements. In re-evaluating the exception, the State should bear in mind that the Clean Water Act does not provide for water quality criteria to be waived based on judgments of relative importance of designated uses. If a particular use is designated for a water body or segment thereof, water quality to support that use must be protected throughout that water body or segment.

11. **Evaluation of effects of Grassland amendments**: In its May10, 2000 concurrence letter

regarding EPA's action on the Grassland amendments to the Basin Plan, the National Marine Fisheries Service recommended that the next triennial review include an evaluation of the effects and effectiveness of several provisions of the Grassland amendments. EPA agrees that it is important to conduct such an evaluation within this time frame in order to ensure that the amendments bring about the intended results and to identify any midcourse modifications needed in their implementation. In particular, NMFS recommended:

1. further investigation of the effects of the policy of "optimizing protection of beneficial uses on a watershed basis";

2. further review of the potential impact of current discharge volumes or flow levels of subsurface agricultural drainage to the San Joaquin River or its tributaries;

3. further review of the potential impact of the delivery of subsurface agricultural drainage to the San Joaquin River via an altered pathway (i.e., other than to Mud Slough (north) and the San Joaquin River from Sack Dam to the mouth of the Merced River).

4. further review of the efficacy and adequacy of the 8,000 pounds per year limit on selenium discharges to the San Joaquin River from agricultural subsurface drainage systems in the Grassland watershed;

5. re-evaluation of the compliance schedule and water quality objectives for selenium in the San Joaquin River, in light of any revised aquatic life criteria proposed by EPA for selenium in California.

12. **Policy for obtaining Salt Balance in the San Joaquin Valley:** SB Res. 95-12 added a statement to the Implementation chapter of the Basin Plan that it is the policy of the Regional Water Board to encourage construction of facilities to convey agricultural drain water from the San Joaquin and Tulare Basins, and that a valley-wide conveyance facility for agricultural drain waters impaired by high levels of salt is the only feasible, long-range solution for achieving a salt balance in the Central Valley. By declaring this approach to be the "only feasible, long-range solution", the Basin Plan implies that other options will not be considered nor pursued. As we stated in our November 12, 1996 comments on the Board's proposed amendment to this policy, EPA does not support this policy, and believes that it is based on insufficient analysis of the options. We strongly encourage the Regional Board to more fully explore and implement options for in-valley management of drainage, rather than advocating an approach that relies on transferring the problem to other watersheds, and to amend the Basin Plan accordingly .

13. **Lack of clarity regarding "appropriate averaging periods" for pH, temperature, and turbidity:** SB Res. 95-12 added provisions to the Basin Plan for "appropriate averaging periods" to be applied in determining compliance with water quality objectives for pH, temperature, and turbidity. The Basin Plan should be amended to define "appropriate averaging periods" or provide guidance for determining same.

ATTACHMENT D

WATER BODIES IDENTIFIED BY NAME, BUT FOR WHICH "MUN" IS NOT CURRENTLY IDENTIFIED AS A DESIGNATED USE IN TABLE II-1 OF THE BASIN PLAN

2 Goose Lake
6 Hat Creek
7 Baum Lake
9 Sacramento River source to Box Canyon Reservoir`
10 Lake Siskiyou
11 Sacramento River Box Canyon Dam to Shasta Lake
17 Battle Creek
21 Thomes Creek
23 Big Chico Creek
24 Stony Creek
25 East Park Reservoir
26 Black Butte Reservoir
28 Butte Creek, below Chico, incl. Butte Slough
29 Colusa Basin Drain
31 Sutter Bypass
32 Lake Almanor
34 Feather River source to Little Last Chance Creek
35 Frenchman Reservoir
37 Lake Davis
38 Lakes Basin Lakes
42 Yuba River Englebright Dam to Feather River
46 Desolation Valley Lakes
52 Yolo Bypass
63 Mokelumne River Camanche Reservoir to Delta
64 Calaveras River source to New Hogan Reservoir
65 New Hogan Reservoir
75 Chowchilla River source to Buchanan Reservoir (= Eastman Lake)
82 Yosemite Lake.